# Life Sciences in Washington

Technology, Energy and Communications November 21, 2006

Dr. Lee Huntsman, Executive Director, Life Science Discovery Fund.

### State Context

#### Global

- Connected
- Self concept
- Benchmarks
- Recognition

#### Innovative

- Consortia
- Companies
- Institutions
- Technology

#### Networked

- Non-hierarchical
- Modest gov't
- Comm'y Action
- Collaborative

#### **Altruistic**

- Non-profits
- Global health
- Philanthropy
- Relief

Entrepreneurial – high rate of company formation & closure

Trade dependent – 20% of jobs related to trade

Washington: 6M people; Strong in ag, aerospace, tech, retail

# Biomedical Enterprises

### Research Companies Non-profits Providers

- 2 res univ's
- Drugs on mkt
- Drug devel't
- Many institutesDevices strong
- National lab IT

Top ca center

- Gates Fndn
- Global Partners
- PATH
- Relief agencies

- Diversified
- Insurance
- Partnered
  - Regional reach

# Biomedical Enterprises

#### Companies Non-profits Providers Research

- Drugs on mkt 2 res univ's
- Gates Fndn

PATH

Diversified

- Top ca center
- Drug devel't
- Global Partners
- Insurance

- Many institutes •
- Devices strong

**Partnered** 

- National lab

- Relief agencies
- Regional reach

Government Support

LSDF; WTC; SIRTI State:

R&D tax incentives

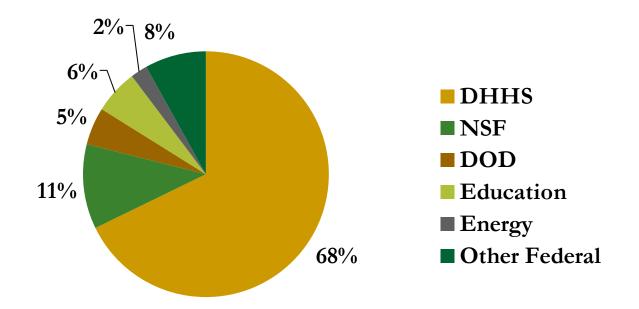
State-wide strategy

Medical school for five states Regional:

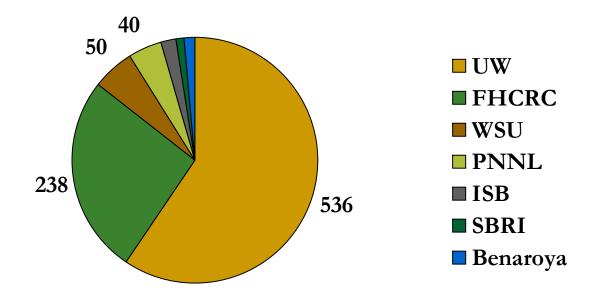
Active EDCs and local enablers Local:

#### UW External Grants and Contracts





# NIH Grants (about \$1B/year)

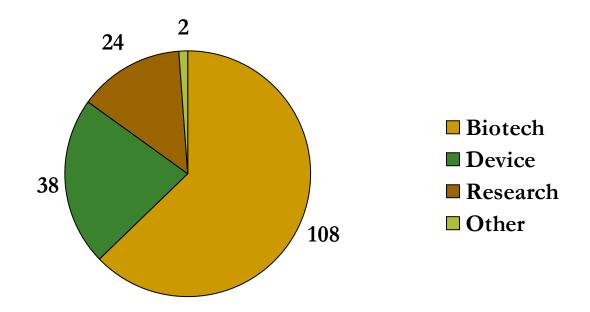


## Companies and Institutions

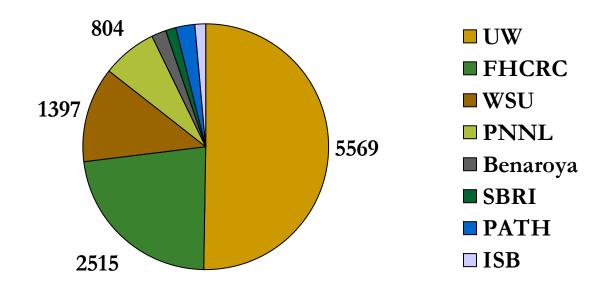
WBBA Members

423 total

182 core

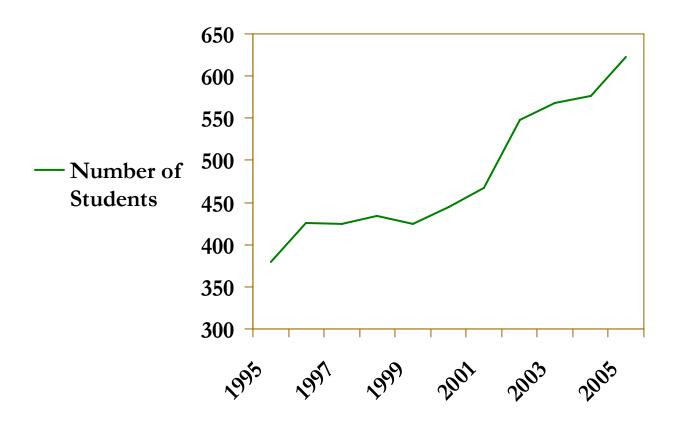


### Research Institution Employment About 12,000 total



Company employment: 30,000 estimate

### Bioscience PhD Enrollment



### **Directions**

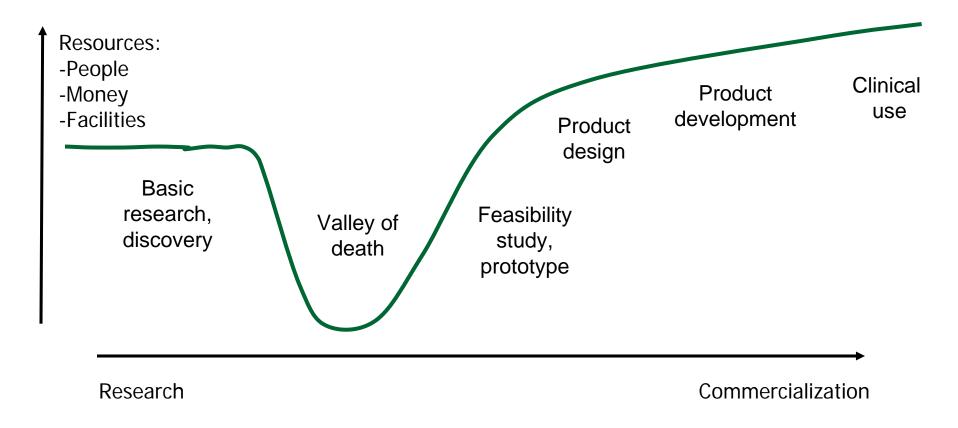
- Institutional cooperation
  - Deep financial: UW with FHCRC, CHMC
  - Grants and students everywhere
- Multi-disciplinary initiatives
  - Stem cell/Regenerative medicine
  - Imaging, Nano, Vaccines
  - D2H2
- Leveraging
  - Shared facilities
  - International partnerships

### **Directions**

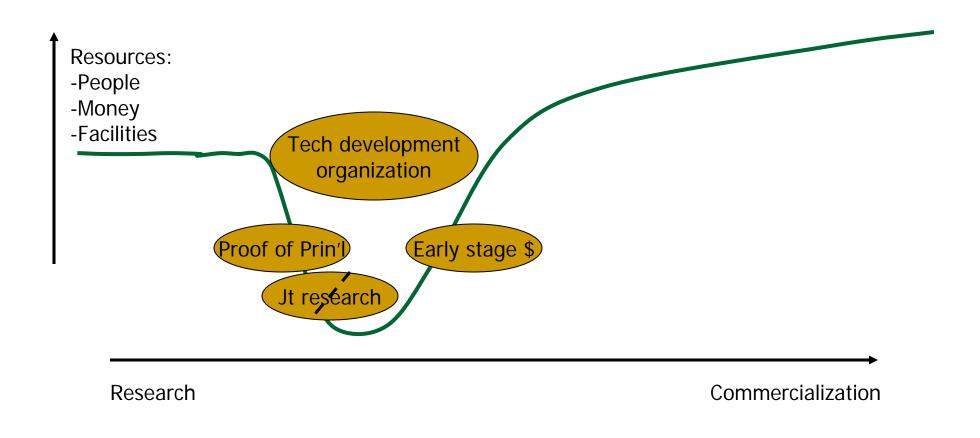
- Evolving focus on health
  - Precision, predictive, preventative
  - Home
  - Global
- Facilities expansion
  - Lake Union; Spokane
  - Amgen Helix campus
  - Gilead growth
  - Drug production capacity
- Public/political support

## Moving research to products

- zone of few resources
- changing landscape



# Facilitating transfer of technologies



### Health Care

Is there potential to:

- create counter forces
- get others to help fund
- improve care

Cost reducing tech Electronic records Clinical trials

Costs

Demographics Technology Inefficiencies

# Zones of Opportunity

- Early stage technologies/companies
- Cost reducing medical technologies
- Hybrid technologies
  - Drugs/imaging
  - Cells/implants
  - Bio-markers/point of care assays

# Life Sciences Discovery Fund

### Life Sciences

Health Related

Discovery, Products, Services

Ag - Biotech - Devices - Health Care

### LSDF and the Life Sciences Sector

- Motivation = economic development
  - Metrics of success = \$, jobs
  - Need ROI within reasonable time
- Research is a key engine
  - Needs some local fuel
- Industry sector is too small
  - Attract or create more companies
- Health Care delivery
  - Small efficiencies = serious ROI

### Research

- Research is an industry
  - Imports high impact money
  - Provides skilled people
  - Creates IP
- Washington research is strong
  - State support has been weak
- LSDF is to research as tax breaks are to other industries

# Life Sciences Fund & Authority

- Created by SB 5581 in 2005
  - to make competitive grants to research institutions and their partners
- Governed by 11 Trustees
  - 7 appointed by the Governor and 4 by the legislature
- Funded by bonus tobacco payments
  - starting in 2008; \$35M/yr

### Board of Trustees

- Dr. Lura Powell, Chair
- Dr. Rita Colwell
- Dr. Jim Cook
- Dr. Tony Hey
- Governor Gary Locke
- Dr. Bruce Montgomery
- Cheryl Scott

- Sen. Lisa Brown
- Sen. Jerome Delvin
- Rep. Jeff Morris
- Rep. Skip Priest

## Underway

- Trustees meet bimonthly
- Operational funding from State
- Ideas/perspective from sectors
- Programmatic/operational planning
- Expected timeline
  - RFP Spring '07
  - Review/award decisions Fall '07
  - Grant funds Spring '08

# Core Strategy = Leverage

#### **Enable** initiatives that:

- Improve cost effectiveness
- Compete for external \$
- Attract investment

#### Not a source of:

- Operating support
- Equity capital

#### LSDF

### Accelerating the Promise of Life Sciences by:

- Enabling research institution success
- Speeding commercialization of research
- Stimulating cost effective care strategies

#### To the benefit of:

- Better health in Washington and beyond
- Economic advances: jobs, funding

